AMENDMENTS

Please amend the above-identified application as follows:

In the Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

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1. (Currently Amended) An apparatus for performing the addition of ~~a~~ propagate, kill, and generate recoded numbers, said apparatus comprising:

a circuitry configured to receive at least a first operand and a second operand, the first and second operands comprising respective first and second propagate, kill, and generate recoded number representations of respective first and second binary operands;

a first carry-save adder configured to add said first operand and said second operand to generate a third propagate, kill, and generate recoded number representation; and

a modified carry-save adder configured to receive the third propagate, kill, and generate recoded number representation from the first carry-save adder, add the separate propagate, kill, and generate bits of the third propagate, kill, and generate recoded number representation in accordance with a carry-in bit to~~, and~~ generate a sum value and a carry value.

2. (Original) The apparatus of claim 1, wherein said sum value and said carry value are dual rail encoded values.

3. (Canceled)

4. (Previously Presented) The apparatus of claim 1, wherein said circuitry is configured to receive and apply a carry-in value to the modified carry-save adder.

5. - 6. (Canceled)

7. (Currently Amended) A method for processing propagate, kill, and generate representations of respective first and second binary operands, comprising:

receiving a carry-in value and a first and a second propagate, kill, and generate representation of respective first and second binary operands;

adding the first and second propagate, kill, and generate representations to generate a third propagate, kill, and generate representation; and

mathematically combining the third propagate, kill, and generate representation ~~and~~ in accordance with the carry-in value to generate a sum value and a carry value.

8. (Previously Presented) The method of claim 7, wherein said step of mathematically combining comprises adding the third propagate, kill, and generate representation and the carry-in value.

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9. (Canceled)

10. (Previously Presented) The method of claim 7, wherein said step of mathematically combining further comprises generating dual rail encoded values.

11. (Previously Presented) The method of claim 7, further comprising:

generating a carry-out value responsive to the adding.

12. - 22. (Canceled)